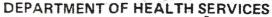
AKO



107 SOUTH BROADWAY, ROOM 7128 LOS ANGELES, CA 90012 (213)620-2380



INTERIM STATUS DOCUMENT COMPLIANCE INSPECTION REPORT

Facility:	BKK Landfill	
	2210 So. Azusa Avenue	
	West Covina, CA	
EPA ID No: _	CAD 067786749	
	PECTION: June 15, 1983 Y: Robert McCrohan, DOHS	
FACILITY REP	PRESENTATIVES: Jack Thompson, Manager, BKK, Joe Johnson,	
	Chief Engineer, BKK, Alexander Weston, Project Engineer, 1	BKK,
	Richard Camp, Surveyer, BKK, Jeanne Delperdang, Chemist,	
	BKK, Richard Bessner, Safety Director, BKK, Dan Shane,	
NUMBER OF IT	EMS CHECKED:	

HAZARDOUS WASTE

SURVEILLANCE AND ENFORCEMENT REPORT

	Date: July 11, 1983
BKK Tendfill	Site Class:
2210 South Azusa Avenue	Site Permit No. CAD 067786749
West Covina, CA	Producer
(213) 965-0911	_ □ Other
ISD Inspection	
ground:	
December 22, 1981: Effective date	of ISD.
보고 있는 아이를 가는 것을 가게 되었다.	
그러 그는 사람들은 사람들이 없어지만 하는데 하고 있었다.	
Joe Johnson, Chief Engineer, BKK	
Alexander Weston, Project Engineer	BKK
Richard Camp, Surveyer, BKK	
Jeanne Delperdang, Chemist, BKK	
Richard Besser, Safety Director, B	KK
그 그 그는 그런 가난 가는 유한 보다.	
ription of Facility:	
BKK is a class I landfill covering	140 acres
e Management Facilities and Procedu	res:
Bulk liquids are placed in cells c	ontaining class II municipal waste while drums
are placed incells in a disignated	drum area. All cells are covered daily.
Robert McCrohan	
	West Covina, CA (213) 965-091 ISD Inspection December 22, 1981: Effective date May 2, 1983; May 4, 1983; June 8, Dates of inspections covered by the ons Present: Jack Thompson; Manager, BKK Joe Johnson, Chief Engineer, BKK Alexander Weston, Project Engineer Richard Camp, Surveyer, BKK Jeanne Delperdang, Chemist, BKK Richard Besser, Safety Director, B Dan Shane, Investigator, USEPA Robert McCrohan, DOHS ription of Facility: BKK is a class I landfill covering e Management Facilities and Procedu Bulk liquids are placed in cells cover are placed incells in a disignated

HAZARDOUS MATERIALS MANAGEMENT REPORT continued

2)	Bulk loads are sampled and screened for order, PH, explosivity and obvious
	discrepancies with the manifest. Information from the tests and the
	manifest are used to determine if the load will be accepted and, if so,
	it requires special handling and/or segregation.
3)	Drums are accepted if the manifest states that they contain solids and
	there is no evidence to the contrary. Drums are seldom opened to checks on
	the accuracy of the manifest.
4)	Two man-made hydrolic barriers (barrier I and barrier 2) have been placed
	in canyons downgradient from the disposal area. At each of these barriers
	is a gravel filled trench from which water can be pumped for dust control.
	Wells are placed near and on both sides of these barriers. Water is drawn
	from these wells and tested for 42 perameters at a schedules determined by
	the Los Angeles RWACB in their May 25, 1982 amendment to the waste discharge
	requirements. See attached May, 83 sample log for current status of the wells
	(attached) Locations of the wells and the monitoring requirements are in
	the Waste Discharge Requirements. (See ISD file)
5)	In addition to the 14 leachate detection wells at the two barriers is
	another 29' well in the canyon adjacent and to the north of the barrier
	l canyon. This is well number 9 on the attached sample log.
6)	A french drain extends south east from a dry well at barrier 1. The drain
	starts at an elevation of 500 feet is 1800 feet long and terminates at a 640
	foot elevation. Leachate that is pumped from this system is placed in a
	class I disposal cavity.
7)	An extensive methane gas collection system operates at the site. The
	gas is presently incinerated on site but there are plans for the installation
	of a gas turbine for generation of electricity. Methane is monitored in

HAZARDOUS MATERIALS MANAGEMENT REPORT continued

the area by the S.C.A.Q.M.D.	
E) Observations:	
The facility has mot initiated a ground water monitoring program	that meets
the criteria of Section V of the ISD. The wells that are monito	red at the
site are leachate detection wells based on the contention by the	facility
representative that the water involved is perched water having n	o continuity
with any ground-water aquifer.	
2) No other ISD violations were observed.	
F) Discussion.	
There is a report at the site by Pacific Soils Engineering, Incorpora	ted.that
may constitute a request for a waiver from ground water monitoring re	quirements on
the basis that there is no ground-water under the site. However, the	report is
inadequate and inconclusive according to Joe Johnson, Chief Engineer,	BKK. Another
consultant, LeRoy Crandel and Associates, has been retained to perform	ı a hydrolo-
gical assessments of the site and to propose a ground water monitoring	program that
would meet the requirements of RCRA and the LARWOCB. The tentative co	mpletion date
for the report is August 1, 1983. A copy of the Crandel proposal is a	attached.
G) Attachments	
1) May, 183 sample log	
2) LeRoy Crandall and Associates Porposal	¥ 2 2 2 2 1

	2 x 8 5 100

TOTAL GALLONS PUMPED: 193,283

MAY 83

Sample to + muscuedo 5/4/83 Rich Besmer

				DIST. TO	WATER		
WELL	BORING	CASING	SLUDGE	WATER	SURFACE	DEPTH OF	. COMMENTS
NO.	ELEV.	ELEV.	ELEV.		ELEV.	WATER	• CUMMENTS
A A	500.0	575.9	BLOCKED	1.0'	* *		DRY MENSURUS 5/4/83
8 ● ▲	480.0	575.9	488.9	11'	564.9	76'	Samous messues obles PN 6
2 A . ▲	500.0	573.4	556.4	16'	857.4	1 succe	DRY MEASURED 54/83
E ● A	484.0	• 573.4	513.4	21'	552.4	39'	Samples morniero 5/4/83 PH6
3 AMA	463.0	575.3	464.3		-	- ,	IN ACCESSABLE
8	498.0	557.3	503.3	23'	534.3	31	SAMPLED · METEURENO SKI/83 PH 6
C A	477.0	557.3	486.3	25'	532.3	46'	SAMPLED MOSCUED SHIES PHG
1 A .	477.0	556.0	491.0	21	535.0	44'	SAMPLED - MERCUEED 5/4/83 PHE
` 4_	498.0	556.0	503.0	25'	531.0	26	SAMPLED - MEASURED ON/23 PHB
C. A	470.0	556.0	473.0	22 4	536.0	63'	Samples - menduero 6/4/83 pur
5	475.0	535.4	486.4	16'	519.4	33'	SAMPLES - MERKUPED 5/4/83 DALL
, A ▲_	531.0	576.7	525.7	24'	552.7	27'	SAMPLED - MERGUEED 5/4/83 ALL
BEA	475.0	576.7	475.7	50'	526.7	51'	Samples - Mersuero Stiles PH
.	500.0	574.5	501.5	72	502.5	1	SAMPLED - MERCURED 5/4/83 AN
7 8,	500.0	574.6	511.6			_	Samples #7
2.	475.0	531.7	502.7	24'	507.7	5'	SAMPLED-MEMSLIERO 54/23 - ALL
*XXXXXXXX	(XXXXXXXX	xxxxxxxx	xxxxxxx	XXXXXXX B	ARRIER II	xxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
? =,	550	685.9*	584.9	84'	601.9	17	Samouro-muscuero stiles PHI
1 2	550	488.7*	597.7	_	_	_	SAMOLEO # 10
2	575	678.7*		69'	609.7		SAMPLED - METERLEED 5/4/83 PH 6
3	560	684.5*	560.5	90'	594.5	34.5	SAMPLED - MERSIEDO 5/4/83 AH
	550	692.8*	553.8	95'	517.8	44.	SAMPLED - MERSURED 5/4/83 AH
•	550	681.0*	589.7	86	595.7	6	Samples masures of/183 A
	■ GR	OUP 1 WELL	S	(G	ROUP 2 WEL	LS	▲ GROUP 3 WELLS

^{*}THE CASINGS ARE RAISED TO ACCOMODATE THE LANDFILLING OPERATIONS



April 22, 1983

BKK Corporation 2550 237th Street Torrance, California 91792

Attention: Mr. Joseph R. Johnson

Vice President, Engineering

Gentlemen:

Proposal - Hydrogeologic Study and Design of Ground Water Quality Control Facilities BKK Landfill, West Covina, California

We have made a brief review of the various reports in your files pertaining to subsurface geologic conditions and the occurrence and movement of ground water at your West Covina Sanitary Landfill site. Our brief appraisal of the information now available suggests that there may be deficiencies in your monitoring program and existing installed facilities for controlling the surface and subsurface movement of hazardous wastes. The proposal we are submitting addresses these deficiencies and should provide a sound basis for developing a technically appropriate program for monitoring your waste disposal facility and controlling the migration of hazardous wastes.

In accordance with your request, we are pleased to submit this proposal to perform a variety of tasks that we believe will be in accordance with the requirements of State and Federal agencies.

SCOPE OF WORK

The scope of work we propose to undertake is generally in accordance with the outline presented to us during the presentation of our qualifications. We have summarized the various tests which you have outlined, and are presenting our plan of approach for accomplishing the work, and a cost estimate for accomplishing your objectives.

TASK 1: Analyze perched ground water data gathered during Interim Status. (RCRA - 40 CFR, Part 264 F.)

TASK 2: Determine source, location, direction and flow rate of perched water. (264.97 & 122.25(c)

- TASK 3: Determine continuity of perched water with other aquifers.
- TASK 4: Determine effectiveness of hydraulic barrier structures (2).
- TASK 5: Determine effectiveness of existing ground water monitoring system.
- TASK 6: Determine extent of contamination (if any). (122.25(c)(4.)).
- TASK 7: Recommend "point of compliance", for RCRA monitoring. (264.95).
- TASK'8: Design the third hydraulic barrier and ground water monitoring system required by the Regional Water Quality Control Board. (Design RCRA Part 264.97 Ground Water Monitoring System)
- TASK 9: Preparation of formal report.

PLAN OF APPROACH

We propose to accomplish the above listed tasks in the following sub-task manner.

TASK 1: Analyze "perched ground water" data gathered during Interim Status.

The Interim Status commenced November 19, 1980. Data have been tabulated for 15 monitoring wells, some of which are multiple wells. It is our understanding that water level measurements and partial chemical analyses are available for about 22 monitoring points. Basic data from these sources will be systematically analyzed by the preparation of water level hydrographs and graphs of key chemical constituents. The "Students 'T' Test", as recommended by EPA evaluation procedures, will be performed at a later date, and will not be undertaken because of time constraints. In addition, precipitation data from the nearby La Puente Station 1125 will be evaluated to determine the local relationship between rainfall and ground water recharge. The graphs prepared under this task in conjunction with other information developed in subsequent tasks, will be studied and conclusions presented in the formal report.



TASK 2: Determine the source, location, direction and flow rate of "perched water".

In order to make this determination, we propose to prepare a map showing the location of all borings, monitoring wells, hydraulic barriers, and oil wells known to have been drilled in the waste management area. We would delineate the lateral extent of the perched water zones on the basis of existing data. In the event the existing data are inadequate to make accurate delineations, we will make recommendations for further exploratory work. Ground water contours would be drawn for several significant hydrologic events during the Interim Status period. Flow rates will be determined where possible, utilizing data developed in Task 1, and known permeability values. Existing aerial photographs will be studied in detail to determine if there are any native vegetation or topographic features that are indicative of springs or potential perched ground water conditions.

TASK 3: Determine the continuity of the "perched water" with other aquifers.

Information currently available to us suggests that the waste management area is located within the head waters of Puente Creek. The natural drainage and flow path appears to be westerly along the Creek. Percolating waters from the headwaters area would migrate towards the aquifers of the Main San Gabriel Basin. Our knowledge of the alluvial aquifers in the area suggests that there are insufficient existing wells within a one-mile radius of the property boundary to make a meaningful evaluation of the continuity of the perched water, and the alluvial aquifers of the Main San Gabriel Basin. We propose to make an evaluation of existing data, and provide recommendations for a more complete determination at a later date. A preliminary evaluation of potential flow paths through joint and fracture systems in bedrock will also be made.

TASK 4: Determine effectiveness of the two hydraulic barrier structures.

We propose to evaluate the barriers on the basis of construction details, and the monitoring data acquired during the Interim Status period. If this information is deficient, we will make recommendations for the future construction of additional monitoring facilities.



TASK 5: Determine the effectiveness of the existing ground water monitoring system.

We propose to study the data developed in Tasks 1, 2, 3 and 4, and make an evaluation of the existing on-site ground water monitoring system. It is our understanding that most of the existing monitoring wells teach depths of less than 90 feet. Our evaluation would include an appraisal of the following conditions related to the efficacy of the system:

- 1. Appropriateness of well site locations
- 2. Geologic units penetrated and monitored
- 3. Well design and construction details
- 4. Integrity of the monitoring sites .
- 5. Deficiencies

TASK 6: Determine the extent of contamination.

We propose to make an evaluation of the extent of contamination within the limits of available information. Results of the study would be illustrated by appropriate maps and drawings. In the event available information is deficient, we will make recommendations for the development of the required information.

TASK 7: Recommend the "Point of Compliance" for RCRA monitoring.

This task will be accomplished after data from the above described tasks are evaluated.

TASK 8: Locate and design the third hydraulic barrier and ground water monitoring system required by the Regional Water Quality Control Board.

The Table of the Lorentz and the

When we have completed most of the assigned tasks and prepared preliminary designs, we propose to meet with representatives of the Regional Board to discuss any requirements they may have established. Our designs would then be developed in consideration of the physical parameters and the Board's requirements and suggestions.

TASK 9: Prepare Progress and Final Reports.

Preliminary information and progress reports will be provided to you during the course of our studies. It is our understanding that a preliminary draft of the report should be submitted to you for review by July 1, 1983. Following your review, we would prepare and submit our final report.



COST ESTIMATE

In order to accomplish the tasks described above, we estimate that nearly four man-months of effort will be required. Our cost estimate is based on the attached Schedule of Charges. The project will be under the direct supervision of Mr., Donald L. McCann. He will be supported by trained and experienced staff hydrogeologists. Day to day direction will be supplied by Mr. Glenn A. Brown, who will be available for presenting progress reports to your management, and conferences with concerned agencies. Our estimated cost for undertaking the work is as follows:

•	DESCRIPTION OF WORK	ESTIMATED COST
TASK 1	Analyze "perched ground water" data	\$ 2,000
TASK 2	Determine source, location, direction and flow rate of perched ground water	\$ 5,000
TASK 3	Determine continuity of perched water with other aquifers	\$ 2,000
TASK 4	Determine effectiveness of hydraulic barrier structures	\$ 2,000
TASK 5	Determine effectiveness of existing ground water monitoring system	\$ 4,000
TASK 6	Determine extent of contamination	\$ 2,000
TASK 7	Recommend "point of compliance"	\$ 500
TASK 8	Design of hydraulic barrier and monitoring system, and liaison	
	with State agencies	\$ 2,000
TASK 9	Preparation of draft and final reports including meeting with	
	representatives of BKK Management	\$ 6,000
	Total Estimated Cost	\$25,500



We have excluded any subsurface exploration in this cost estimate because of probable time constraints. However, our final report will include our recommendations and cost estimate for this future work. We estimate that the total cost of performing the work outlined above will be about \$25,500. We suggest that a contingency of about 10 percent be added to the amount, which would increase the total estimated cost to \$28,000. This amount would not be exceeded without your prior approval. This letter and the terms on the reverse hereof, together, are the agreement for our services. We appreciate the opportunity of submitting this proposal and will be pleased to work with you on this project.

Yours very truly,

Leroy CRANDALL AND ASSOCIATES

by

Donald L. McCann

Principal Hydrogeologist

by

Glenn A. Brown, Director Geological Services

GAB-DLM/jj
Attachment
(3 copies submitted)





SCHEDULE OF CHARGES FOR FOUNDATION AND GEOLOGIC INVESTIGATIONS

The fee for our services will be based on the charges listed below. All fee quotations are applicable for a period of 90 days from the date of the proposal to which the schedule is attached.

PERSONNEL

Professional:	Hourly Rate
Staff Engineer/Staff Geologist. Senior Engineer/Senior Geologist Project Engineer/Project Geologist Chief Engineer/Chief Geologist Senior Consultant	\$ 57 \$ 70 \$ 75
Sub-professional:	
Clerical Drafter Laboratory Technician Senior Laboratory Technician Field Assistant Field Technician	\$ 31 \$ 29 \$ 43 \$ 27

These rates apply to regular time and travel time in the United States. A maximum travel time of eight hours will be charged in any day. Overtime, if required in the interest of the project, will be charged at the above rates for professional personnel and at 1.25 times the above rates for sub-professional personnel. Overtime will apply to time in excess of eight hours per day and all time on Saturdays, Sundays, and holidays. In the event of adverse weather conditions or other factors beyond our control, a minimum standby charge of four hours per weekday will be made for field personnel. Expert witness services, including trial preparation, depositions, and court appearances, will be billed at 1.5 times the above rates.

EQUIPMENT CHARGES

Undisturbed Samples	\$ 2.00/sample
Seismic Survey Equipment - Multi-Channel	\$ 300.00/day
Water Level Recorder (Stevens F-Type)	
Determination of Electrical Conductance and pH	\$ 4.00/test
Field Measurements of Specific Ions	\$ 9.00/test
Passenger Car	\$.30/mile
Pick-Up Truck \$0.30/mile with minimum of	\$ 32.00/day
4Wheel Drive \$0.35/mile with minimum of	\$ 37.00/day

COMPUTER

Charges for computer usage will be 3 times our cost and are in addition to personnel rate.

REIMBURSABLE ITEMS

Outside services performed by others and direct expenses incurred on the clients' behalf are charged at 1.15 times our cost. Such items include, but are not limited to, outside consultants and testing laboratories, rental and operation of drilling, bulldozing, and other field equipment, non-reusable equipment, blueprinting, long-distance communications, subsistence, transportation charges, auto rental, freight, and any special permits and inspection fees.

INSURANCE

LeRoy Crandall and Associates maintains General Liability Insurance for bodily injury and property damage with an aggregate limit of \$1,000,000 per occurrence for its own account and will furnish certificates of such insurance upon request. In the event the client desires additional coverage, we will, upon the client's written request, obtain additional insurance (if possible) at the client's expense.

TERMS

1. DEGREE OF CARE

In performing their professional services, LeRdy Crandall and Associates (hereinafter called Crandall) will use that degree of care and skill ordinarity exercised, under similar circumstances, by reputable members of their profession practicing in the same or similar locality. No other warranty, express or implied, is made or intended by this proposal for Crandall's services or by furnishing oral or written reports of the findings made. Crandall is to be liable only for damage proximately caused by Crandall's negligence, error or omission.

2. SUBTERRANEAN STRUCTURES

In the performance of their work, Crandail will take all reasonable precautions, but will not be responsible for damage or injury resulting from damage to subterranean utilities or other installations which are not called to Crandall's attention or are not correctly shown on any plans furnished by Client or his representative.

3. CLAIMS BY CLIENT

In the event the Client makes a claim or brings an action against Crandall for any act arising out of the performance of Crandall's professional services, and the Client fails to prove such claim or action, then the Client shall pay all legal and other costs incurred by Crandall in defense of such claim or action.

4. WARRANTY OF AUTHORITY TO SIGN

The person signing this contract warrants he has authofity to sign as, or on behalf of, the Client for whom of for whose benefit Crandall's services are rendered. If such person does not have such authority, he agrees that he is personally liable for all breaches of this contract, and that in any action against him for breach of such warranty a reasonable attorney's fee shall be included in any judgment rendered.

5. PAYMENT

Statements for services of Crandall will be submitted at Crandall's option either upon completion of work or on a monthly basis. Statements will be mailed to the addressee of this letter, and will be due immediately. Payments are to be made not later than the 10th day following the end of the month during which the statement is dated. If payment is not so made, interest will be due on the amount of the statement at the rate of nine (9) per cent per annum from the date of the statement until the same is paid, and it is agreed that if suit is filed or informal proceedings are needed to obtain or to enforce payment of the statement, addressee is to pay Crandall, in addition to the amount of the statement and interest thereon, all costs of collection including court costs, and such reasonable attorney's fees as the court may fix, or if collection is obtained without court action, then in the amount of fifteen (15) per cent of the total amount due, including interest.

6. INSURANCE

LeRoy Crandall and Associates maintains for its own account General Liability Insurance for bodily injury and property damage with an aggregate limit of \$1,000,000 per occurrence and Workers Compensation Insurance as required by law and will furnish ceritificates of such insurance upon request. In the event the client desires additional coverage, we will, upon the client's written request, obtain additional insurance (if possible) at the client's expense.